CLAIMS

What is claimed is:

1.   A smart tray system comprising:

a plurality of information tags, each information tag adapted to be disposed on a food tray and include information about the food tray and a food product contained therein; and

a plurality of communication devices, each communication device adapted to communicate with the information tags when each information tag is located in proximity of each communication device.

2.   The smart tray system of claim 1, wherein the information tags are radio frequency tags.

3.   The smart tray system of claim 1, wherein the information tags are data storage devices.

4.   The smart tray system of claim 1, wherein the communication devices are adapted to read the information from the information tags and write the information on the information tags.

5.   The smart tray system of claim 1, further comprising a plurality of food devices, each food device adapted to receive one or more of the food trays, wherein each food device includes at least one of the communication devices.

6.   The smart tray system of claim 5, wherein each food device comprises a computing device adapted to manage the operation of the food device and the at least one of the communication devices included with the food device.

7.   The smart tray system of claim 6, wherein the computing device of each food device is adapted to provide communication with other food devices and the communication devices by a communication network.

8.   The smart tray system of claim 7, wherein the communication network is a wired communication network.

9.   The smart tray system of claim 7, wherein the communication network is a wireless communication network.

10.   The smart tray system of claim 1, wherein the plurality of communication devices are adapted to communicate with each other.

11.   The smart tray system of claim 1, further comprising at least a programming device adapted to write information on the plurality of information tags.

12.   The smart tray system of claim 1, further comprising a mobile communication device adapted to communicate with the information tags.

13.   A restaurant inventory management system comprising:

a plurality of information tags, each information tag adapted to be disposed on a food tray and include information about the food tray and a food product contained therein;

a plurality of communication devices, each communication device adapted to communicate with the information tags when each information tag is located in proximity of each communication device; and

at least one computing device operatively coupled to the communication devices and adapted to manage the communication of each of the communication devices with each of the information tags.

14.   The restaurant inventory management system of claim 13, wherein the information tags are radio frequency tags.

15.   The restaurant inventory management system of claim 13, wherein the information tags are data storage devices.

16.   The restaurant inventory management system of claim 13, wherein each communication device is adapted to read information from the information tags and write information on the information tags.

17.   The restaurant inventory management system of claim 13, further comprising a plurality of food devices, each food device adapted to receive one or more of the food trays, wherein each food device includes at least one of the communication devices.

18.   The restaurant inventory management system of claim 13, wherein the computing device includes inventory management capability.

19.   The restaurant inventory management system of claim 17, wherein each food device is operatively coupled to the computing device.

20. The restaurant inventory management system of claim 19, wherein each food device is operatively coupled to the computing device by a wired communication network.

21. The restaurant inventory management system of claim 19, wherein each food device is operatively coupled to the computing device by a wireless communication network.

22. The restaurant inventory management system of claim 13, further comprising at least a programming device for writing information on the information tags.

23. The restaurant inventory management system of claim 13, further comprising a mobile communication device adapted to communicate with the information tags.

24. The restaurant inventory management system of claim 23, wherein the mobile communication device is operatively coupled to the computing device.

25. A method of restaurant inventory management comprising:

storing information about a food product contained in a plurality food trays on information tags, each food tray having at least one information tag disposed thereon;

tracking the information about the food product contained in the food trays during one or more processes on the food product contained in the food trays with a plurality of communication devices adapted to communicate with each

information tag when each information tag is located in proximity of each communication device; and

updating the information about the food product contained in the food trays responsive to the tracking of the information during the one or more processes on the food product contained in the food trays.

26.   The method of claim 25, wherein the storing of information on the information tags is provided by a programming device having at least one communication device capable of writing information on the information tags.

27.   The method of claim 25, wherein the information stored on the information tags includes at least one of an identification information for the food tray on which the information tag is disposed, the type of food product contained in the food tray on which the information tag is disposed, and duration of time for the one or more processes on the food product contained in the food tray on which the information tag is disposed.

28.   The method of claim 25, wherein the tracking comprises reading the information on the information tags with the communication devices during the one or more processes on the food product contained in the food trays.

29.   The method of claim 25, wherein the one or more processes on the food product contained in the food trays include at least one of storing the uncooked food product, cooking the food product, storing the cooked food product, removing cooked food product from the food trays, adding cooked food product to the food

trays, and moving the food trays in which the food product is contained from one location to another location in the restaurant.

30.   The method of claim 25, wherein the updating comprises writing information on the information tags with the communication devices responsive to the tracking of the information during the one or more processes on the food product contained in the food trays.

31.   The method of claim 25, further comprising processing the information during at least one of the storing, the tracking, and the updating, the processing being performed by at least a computing device, wherein at least one of the storing, the tracking, and the updating is performed with the computing device by the plurality of the communication devices being operationally coupled to the computing device and communicating information with the computing device.

32.   The method of claim 31, wherein the processing of the information by the computing device provides restaurant operational and inventory information.